

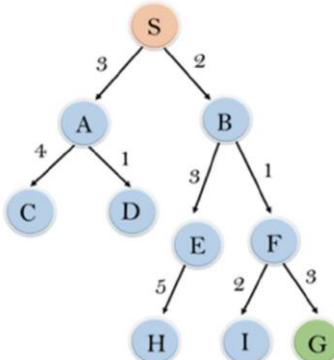
Question Paper consists of Part-A and Part-B  
Answer ALL the question in Part-A and Part-B

PART-A (10X2 = 20M)

		Marks	CO	BL
1. a)	What is AI?	(2M)	CO1	BL1
b)	What is a task environment?	(2M)	CO1	BL1
c)	What is uninformed search strategy?	(2M)	CO2	BL1
d)	Explain in short about Adversial search	(2M)	CO2	BL2
e)	What is constraint propagation	(2M)	CO3	BL1
f)	Explain in short rules-based deduction systems.	(2M)	CO3	BL2
g)	Define Inductive learning.	(2M)	CO4	BL1
h)	Write a short note on Reinforcement Learning	(2M)	CO4	BL1
i)	What is meant by Expert systems	(2M)	CO5	BL1
j)	What is meant by XCON?	(2M)	CO5	BL1

PART-B (5X10 = 50M)

2a.	Explain Goal based agent with proper diagram	5(M)	CO1	BL2
b.	Explain Utility based agent architecture with proper diagram	5(M)	CO1	BL2
(OR)				
3a.	Explain in detail the properties of Task Environments.	6(M)	CO1	BL2
b.	Explain the problems of AI	4(M)	CO1	BL2

4.	<p>Apply Greedy best-first search, A* search strategies for below tree and find the path sequence from S to G</p>  <table border="1" data-bbox="518 1590 734 1993"> <thead> <tr> <th>node</th> <th>H (n)</th> </tr> </thead> <tbody> <tr><td>A</td><td>12</td></tr> <tr><td>B</td><td>4</td></tr> <tr><td>C</td><td>7</td></tr> <tr><td>D</td><td>3</td></tr> <tr><td>E</td><td>8</td></tr> <tr><td>F</td><td>2</td></tr> <tr><td>H</td><td>4</td></tr> <tr><td>I</td><td>9</td></tr> <tr><td>S</td><td>13</td></tr> <tr><td>G</td><td>0</td></tr> </tbody> </table>	node	H (n)	A	12	B	4	C	7	D	3	E	8	F	2	H	4	I	9	S	13	G	0	10(M)	CO2	BL3
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(OR)				
5a.	Apply the AO* Algorithm for given tree and explain it.	6(M)	CO2	BL3
b.	Solve 8 puzzle problem by using any AI technique.	4(M)	CO2	BL3

6a.	Explain the approaches to knowledge representation?	5(M)	CO3	BL2
b.	Explain the issues of knowledge representation?	5(M)	CO3	BL2
(OR)				
7	Explain the Dempster-Shafer theory with suitable example.	10(M)	CO3	BL2

8a.	Explain forward chaining with example.	5(M)	CO4	BL2
b.	Explain Backward chaining with example	5(M)	CO4	BL2
(OR)				
9a.	Explain Decision trees learning with Example.	6(M)	CO4	BL2
b.	Classify Propositional vs. First Order Inference	4(M)	CO4	BL2

10a	Explain in detail about Expert system architecture.	5(M)	CO5	BL2
b.	Explain the knowledge acquisition process.	5(M)	CO5	BL2
(OR)				
11.	Explain the following a. MYCIN b.DART	10(M)	CO5	BL2

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